6. THE CLAIMS

It is claimed:

1. A microphone comprising:

   a) a plurality of electrical contacts for interfacing with an external device; and

   b) a circuit, connected to at least one electrical contact, that provides the external device with data that identifies at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

2. The microphone of claim 1 where the circuit forces the voltage potential between the at least one electrical contact and another of the plurality of electrical contacts to be zero.

3. The microphone of claim 1 where the circuit forces the voltage potential between the at least one electrical contact and a ground electrical contact to be zero.

4. The microphone of claim 1 where the circuit includes a resistor having a first and a second terminal, the first resistor terminal being connected to the at least one electrical contact, the second resistor terminal connected to another of the plurality of electrical contacts.

5. The microphone of claim 1 where the circuit includes a capacitor having a first and a second terminal, the first capacitor terminal being connected to the at least one electrical contact, the second capacitor terminal connected to another of the plurality of electrical contacts.

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6. The microphone of claim 1 where the circuit includes an inductor having a first and a second terminal, the first inductor terminal being connected to the at least one electrical contact, the second inductor terminal connected to another of the plurality of electrical contacts.

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7. The microphone of claim 1 where the circuit includes a programmable read only memory storing data that identifies at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone

15 uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

8. The microphone of claim 1 where the circuit includes a serial programmable read only memory storing data that identifies at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the

20 microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, or the microphone dynamic

response.

9. The microphone of claim 1 where the circuit includes a serial electrically erasable programmable read only memory storing data that identifies at least one of the following:

5   the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, or the microphone dynamic response.

10 10. An interface unit comprising:

    a) a first connector having a plurality of electrical contacts for interfacing with a microphone; and

    b) a second connector having a plurality of electrical contacts for interfacing with a computer system via a digital bus;

15   wherein the interface unit is operable to obtain data from the microphone related to at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response; and

20   wherein the interface unit is operable to transmit the data to the computer system.

11. The interface unit of claim 10 further comprising:

    c) an amplifier for amplifying an analog signal received from the microphone;

d) an analog-to-digital converter, coupled to the amplifier;

e) a buffer, coupled to the analog-to-digital converter;

f) a bus interface coupled to the buffer; and

g) an I/O port for communicating with a computer system.

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12. The interface unit of claim 11, wherein the analog-to-digital converter is also coupled to a microphone bias circuit.

13. The interface unit of claim 11, wherein the analog-to-digital converter is also coupled

10   to a microphone bias circuit that contains a resistor having a first terminal and a second terminal, the first resistor terminal connected to at least one of the first connector's plurality of electrical contacts.

14. The interface unit of claim 11, wherein the first connector's plurality of electrical

15   contacts includes a first electrical contact and a second electrical contact;

wherein the bus interface is coupled to the first electrical contact, which contains a serial clock signal; and

wherein the bus interface is coupled to the second electrical contact, which contains serial data signals.

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15. The interface unit of claim 11, further comprising a switch that is configured to identify a physical parameter of a microphone.

16. The interface unit of claim 15, wherein the switch is coupled to the bus interface.

17. The bus interface of claim 10 further comprising a third connector for interfacing with a second microphone.

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18. The interface unit of claim 10 further comprising a third connector for interfacing with another interface unit.

19. A microphone comprising:

10   a) a connector having a plurality of electrical contacts for interfacing with a computer system via a digital bus;

wherein the microphone is operable to transmit data to the computer system via the connector related to at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial

15   number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

20. The microphone of claim 19 further comprising a programmable read only memory storing data that identifies at least one of the following: the microphone manufacturer, the

20   microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

21. The microphone of claim 19 further comprising a serial programmable read only memory storing data that identifies at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone

5   uses phantom power, the desired pre-amplifier gain, or the microphone dynamic response.

22. The microphone of claim 19 further comprising a serial electrically erasable programmable read only memory storing data that identifies at least one of the following:

10   the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, or the microphone dynamic response.

15   23. A method of transferring data to a computer system, the method comprising:

      a) interfacing a microphone with an interface unit;

      b) interfacing the interface unit with a computer system;

      c) transferring data from the interface unit to the computer system, the data related to at least one of the following: the microphone manufacturer, the microphone

20   manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

24. The method of claim 23, further comprising modifying at least one setting in the computer system based at least in part on the transferred data.

25. The method of claim 23, further comprising modifying at least one setting in the interface unit based at least in part on the transferred data.

26. A method of transferring data to a computer system, the method comprising:

    a) interfacing a microphone with a computer system;

    b) transferring data from the microphone to the computer system, the data related to at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response.

27. The method of claim 26, further comprising modifying at least one setting in the computer system based at least in part on the transferred data.

28. The method of claim 26, further comprising modifying at least one setting in the microphone based at least in part on the transferred data.